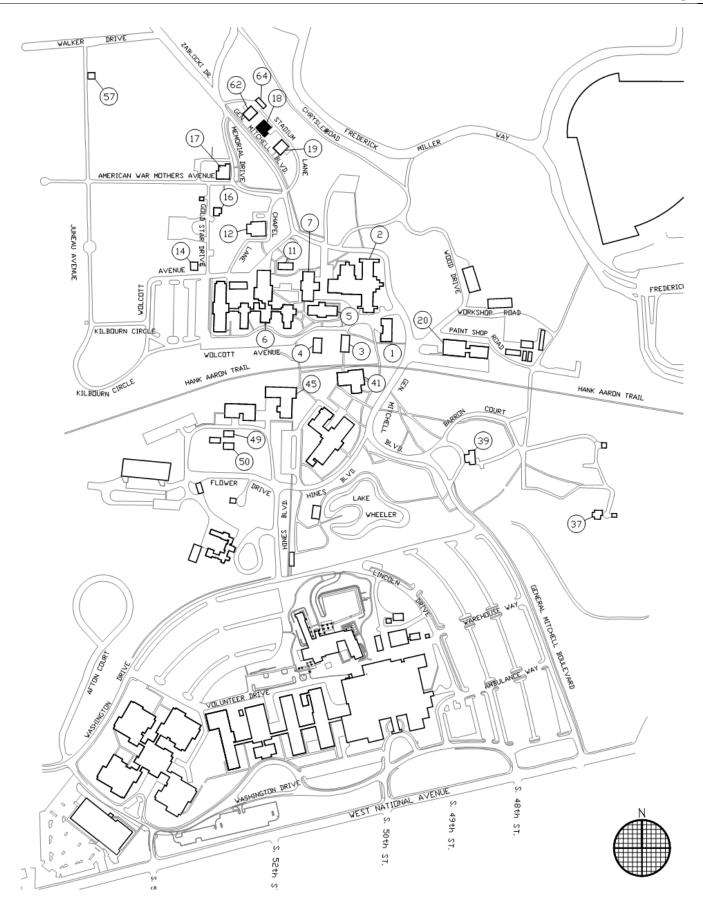
Site Map 18-2
Building Abstract 18-3
Building Descriptions 18-4
Maintenance and Treatment Plans 18-11





Chapter 3: Architectural and Archeological

**Structure Number:** 18

Original Use: Housekeeping Quarters
Present Use: Personnel Quarters

Construction Date: 1916
Architect: Unknown

**Number of Levels:** Four (including basement and storage attic)

Total Area: 7,370 square feet
Plan Shape: Rectangular
Basic Construction: Wood framing
Uses per Floor: Basement
First Floor

Living, Dining, Kitchen, enclosed porch with close, Pantry off Kitchen, 1 Closet, 2 Stairs

back to back

#### Second Floor

3 Bedrooms, Screened Porch plus Hall, 1 Closet off Hall, 2 Stairs back to back

## Third Floor

Attic with Stairs to storage area







## **Architectural Building Description**

Quarters Building 18

Building 18 is a three story frame duplex in the Colonial Revival style, oriented with the main facade to the southwest. Each duplex unit is a mirror image of the other and there is no visible division on the exterior. The walls are sided in clapboard and the building has a gabled, dark gray shingle roof. The gable is broken by a shed dormer on the southwest side that is shared by both units. Each unit has a small brick chimney near the center of the building. The basement foundation wall is cement block.

Each unit is entered via an outside screened corner porch with a hipped roof. The porches stretch halfway across each unit and for two bays around the sides. The porch columns are square posts without any decoration. The bottom third of the screening is white clapboard. A lattice covers the porch foundations. Beyond are the wood and glass, single-entry doors. Two open porch decks lead to the rear doors. Toward the center of the front facade, each unit has a large one-over-one light double-hung window. Above these windows and above the front doors are smaller double-hung windows with one-over-one lights. There are two casement windows for each unit located in the central shed dormer. The building's gable ends have randomly spaced windows of various sizes. On the interior, the units share oak woodwork, two-panel doors, and picture railing. Walls and ceilings are plastered. Each unit has a fireplace set within a niche on the side of the main stairway. The building continues to be used as housing.

-NHL Nomination, Northwestern Branch, National Home for Disabled Volunteer Soldiers (2010)

Additional comments on current use and condition:

Currently, the south portion of Building 18 is serving as a residence, while the north portion is unoccupied.

The building exterior is in fair condition. The concrete foundation and most wood elements have peeling paint. The wood siding has exposed fasteners that are rusting. The older wood windows have had aluminum storm windows added on the exterior. The asphalt shingle roof is deteriorating and the roof structure has visible sagging. The wood ramp is not complaint with current handicap accessibility standards.

The north portion of the building interior is unoccupied and the south portion is occupied. Both are in good condition. There is evidence of substantial water infiltration in the attics, with many of the second floor ceiling finishes peeling. Plastic membranes have been laid across the floors of the attics to help prevent further water damage below. Building levels and toilet rooms are not handicap accessible.

#### FOUNDATION/BASEMENT CONSTRUCTION

The existing foundation system for *Building 18* consists of a masonry wall construction, with a thickness of roughly 1'-0". The foundation wall system for this building also utilizes 12" internal masonry piers with intermediate wood floor beams. In addition, subsequent & additional structural shoring appears to be have been recently added as evidence by the presence of additional steel pipe columns. These new steel pipe columns, along with the additional steel beams that have been provided, appear to be providing additional support for the main wood floor beams above.

The exterior foundation wall system, along with the internal masonry piers & associated wood floor beams, serve as the main support for the 2x wood floor & wall framing members above.

Portions of the existing foundation walls have been left exposed from the exterior, while the foundation walls have been left fully exposed within the basement space. In both instances, these walls retain a painted masonry wall finish.

#### **NOTED DEFICIENCIES**

Overall, the existing masonry foundation walls were found to be in 'good' condition.

Minor cracking and surface deterioration is present on both the exterior & interior faces of the foundation walls. There was also significant structural deterioration found for many of the interior masonry piers. More significant cracking and surface deterioration was at the foundation walls at the (2) exterior patio locations.

In addition, there is some evidence of moisture damage as evidence by the presence of surface deterioration and discoloration of the exposed basement foundation walls. In some instances, some of the exterior & interior painted finishes have begun to chip and peel away.

See the 'Exterior Maintenance Treatment Plan' for affected areas and locations of noted deficiencies above.

#### **RECOMMENDATIONS**

Re-pointing of all existing masonry foundation walls where cracking and deterioration has occurred should be addressed in the near future. Cleaning & removal of the surface deterioration that is currently present would also be recommended.

In regards to the foundation walls at the (2) exterior patio locations where more significant cracking has occurred, further structural analysis is advised to help determine the extent and type of repairs needed. Temporary structural shoring along with new foundation walls may be required at these locations in order to prevent further structural deterioration to the floor construction above.

#### FIRST & SECOND FLOOR CONSTRUCTION

All exterior wall framing above the basement walls appears to be 2x wood studs. The majority of the exterior wall framing was not visible due to the interior finishes present, but is assumed to be standard 2x wall framing at 24" on center.

First floor framing consists 2x wood floor joists, supported by intermediate masonry piers & intermediate wood floor beams. Secondary steel columns & beams appear to have been recently added as a means of providing additional support to the main floor beams above. The existing first floor framing has been left exposed and is readily visible from the basement. Existing wood floor framing was found to be roughly 16" on center.

## **Structural Building Description**

Quarters Building 18

First floor framing also includes the floor framing associated with the (2) exterior patios. Floor framing for these patios is not readily visible from the exterior, but is assumed to be constructed of 2x wood floor joists at roughly 16" on center. Floor joist are then supported by perimeter concrete posts & beams.

Second Floor framing is not readily visible due to the interior finishes present, but is assumed to be constructed of 2x wood floor joists at roughly 16" on center.

#### **NOTED DEFICIENCIES**

The First & Second Floor wall framing is not readily visible due to the interior finishes present. However, there is no evidence of moisture damage or other deficiencies as evidenced by the current status of the existing wall finishes.

In regards to the main First Floor framing that has been left fully exposed & is readily visible from the basement, there is some evidence of moisture damage & surface deterioration as evidence by the discoloration of the exposed wood floor joists and associated framing. More importantly however, moderate cracking & structural deterioration was found in some of the intermediate wood floor beams.

The First Floor framing associated with the (2) exterior patios have been left fully exposed to the exterior. In this instance, there is some evidence of moisture damage & surface deterioration as evidence by the discoloration of the exposed wood floor joists and associated framing. In some instances, the painted finishes have begun to chip and peel away.

The Second Floor framing is not readily visible due to the interior ceiling finishes present. There is no evidence of moisture damage or other deficiencies as evidenced by the current status of the existing ceiling finishes.

However, there is one area of significant concern in regards to the Second Floor framing. The floor framing associated with the eastern half of the building has experienced significant structural deflection & differential movement. This has caused noticeable sagging and warping of the finished floor surface.

See the 'Interior Maintenance Treatment Plan' for affected areas & locations of the noted deficiencies above.

#### **RECOMMENDATIONS**

In general it is recommended that all structurally solid exposed interior and exterior wood framing members be cleaned and refinished to prevent further weathering and surface deterioration.

In regards to the Second Floor construction where noticeable structural deflection differential movement has begun to take place, further structural analysis is advised to help determine the extent and type of repairs needed. Structural shoring & additional floor framing may be required to prevent further structural damage.

#### **ROOF CONSTRUCTION**

The main roof construction for the building is a gable-style roof and also includes (2) pitched roof exterior patios.

The main roof construction is constructed 2x wood rafter framing, spaced roughly 24" on center and is supported by the exterior 2x wood wall framing. Rafter framing is then over-framed with 2x wood roof boards and finished off with asphalt shingles.

Roof framing associated with the pitched roofs for the (2) exterior patios is not readily visible due to the interior ceiling finishes present, but is assumed to be constructed of standard 2x wood roof framing, spaced roughly 24" on center.

Roof framing is then supported by both perimeter wood posts & beams and the exterior 2x wood wall framing. Finish for this roof is comprised of asphalt shingles.

## **Structural Building Description**

Quarters Building 18

#### **NOTED DEFICIENCIES**

The existing wood roof framing associated with the main roof as well as the (2) exterior patios was found to be in 'excellent' condition. However, there is a presence of minor moisture damage & surface deterioration as evidence by the surface discoloration of the exposed wooden members.

See the 'Interior Maintenance Treatment Plan' for the affected areas and locations of the noted deficiencies above.

#### **RECOMMENDATIONS**

In general it is recommended that all exposed interior & exterior wood roof framing be cleaned and refinished to prevent further weathering and deterioration. Wood members that are structurally compromised should be replaced.

#### **MECHANICAL DESCRIPTION:**

The mechanical system consists of two furnaces with ducted supply and return air to the space. The furnaces are high-efficiency natural gas furnaces with remote DX-style condensing units. A furnace located in the basement serves the each apartment. The lower level is served with in-floor air distribution and the upper level has overhead air distribution from the attic space. Natural ventilation through operable windows is the only source of ventilation air. No mechanical ventilation is present.

Plumbing for the facility consist of a residential natural gas water heaters in each apartment. Hot water is distributed throughout each apartment. No hot water recirculation is present. Plumbing fixtures consist of residential style fixtures. Storm is drained to grade via rain gutters and downspouts.

No fire protection is present in the facility.

#### **MECHANICAL NOTED DEFICIENCIES:**

- Return air ductwork routed in the unconditioned attic space is not insulated. This does not meet current energy codes and could result in condensation accumulation.
- No mechanical exhaust is present in the toilet rooms.

#### **MECHANICAL RECOMMENDATIONS:**

KJWW Engineering conducted a facility visual non-destructive investigation and recommends the following items bring the facility to habitable conditions.

- Insulate the return air ductwork in the unconditioned attic space to meet current energy codes.
- Provide mechanical exhaust in the toilet rooms.

#### **ELECTRICAL DESCRIPTION:**

The Electrical system consists of a 150A, 120/240V, 1 phase, 3 wire service, with utility meter and pedestal, and transformer XF62 located west of the house. Circuit breaker panels are located in the basement with 150A main disconnecting means, both located in one side of duplex. Branch lighting and power circuits are installed in both MC Cable and EMT conduit. Lighting throughout the interior of the house, as well as on the exterior is of a 120V incandescent lamp source and varies in surface, recessed, and suspended residential type fixtures. Standard toggle switch type control is provided throughout first and second floor rooms with some pull chain type fixtures in the basement and attic spaces. Stand alone battery type smoke alarms are located on each of the levels from basement to the attic. Building is in good condition and is occupied as a duplex. Both sides are in good condition and currently occupied.

#### **ELECTRICAL NOTED DEFICIENCIES:**

- Miscellaneous junction boxes missing covers and splices exposed.
- Miscellaneous light switches and receptacles appear to be in need of replacement.

#### **ELECTRICAL RECOMMENDATIONS:**

KJWW Engineering conducted a facility visual non-destructive investigation and recommends the following items bring the facility to habitable conditions.

Change lamping to a self-ballasted type fluorescent lamp.

- Inspect all EMT conduit, MC Cable, and junction box installations and bring up to current installation standards.
- Replace the existing lighting switches, power receptacles, and faceplates throughout the entire house.
- Replace wiring and disconnects for new furnaces and condensing units.
- Provide GFI receptacles where required by code and VA standards.

#### **TECHNOLOGY DESCRIPTION:**

The Technology systems currently consist of telephone and CATV cabling.

The building is fed by buried multipair copper telephone backbone cabling and coaxial CATV cabling.

Telephone cabling consists of a mixture of Quad-type cable, CAT 3 cable, and CAT 5e cable run to faceplates and surface-mount boxes. CATV cabling consists of RG-6 cable installed exposed and run to faceplates; some of the CATV cabling is run on the exterior of the building.

#### Asbestos

Building 18 has minor damage of materials suspected of containing asbestos (suspect material) that may contribute to the release of or exposure to asbestos.

#### **Asbestos Noted Deficiencies and Recommendations**

Vinyl flooring located in the kitchens of both north and south units showed evidence of peeling and should be repaired. Friable thermal insulation located in the attic is exposed and should be contained to prevent further exposure or damage. See the 'Hazardous Materials Maintenance Treatment Plan - Exterior' and 'Hazardous Materials Maintenance Treatment Plan - Interior' for locations of affected areas noted above. All activities involving asbestos or materials assumed to contain asbestos should be conducted in accordance with all local, state and federal rules and regulations.

#### **Lead-Based Paint**

Painted exterior building surfaces include foundation walls, wood porch structural members, wood clapboards, wood stairs and associated framing, window frames, doors and door frames, and eaves/ trim. Painted interior building surfaces include foundation walls, wood floor joists and wood beams, doors and door frames, window frames, ceiling and walls.

#### **Lead-Based Paint Noted Deficiencies**

The exterior paint is chipped and peeling on eaves/ trim, doors and door frames, wood porch structural members, wood stairs and associated framing, doors and door frames, window frames, and wood clapboards. The interior paint is chipped and peeling on foundation walls, wood floor joists and associated framing in basement, wood porch structural members, walls, ceilings, and doors and door frames. See the 'Hazardous Materials Maintenance Treatment Plan - Exterior' and 'Hazardous Materials Maintenance Treatment Plan - Interior' for locations of affected areas noted above.

#### **Lead-Based Paint Recommendations**

Paint which has begun to peel due to a failure of the bond to the wood, plaster, or metal substrate should be removed. Paint is best removed with the careful use of metal scrapers. Sanding is usually required to eliminate rough surfaces and to smooth the transition between areas of raw wood and solid original painted surfaces. Before repainting, all raw surfaces should be primed with a tested and approved primer. This treatment should then be followed by required coat(s) of paint of the type and color to match the surrounding area. All activities must be conducted in a manner consistent with the requirements provided in 29 CFR 1926.

#### **Suspect Mold Growth**

Building 18 shows signs of moisture damage. The exposed basement foundation walls and floors have surface discoloration, a sign of moisture damage. The wood structural members visible in the basement for the first floor have surface discoloration of the exposed wood floor joists and associated framing. The exposed wooden members in the attic have surface discoloration. The exposed wood structural members of both porches have surface discoloration.

### **Suspect Mold Growth Noted Deficiencies**

Suspect mold growth was visually observed on window frames in the attic. See the 'Hazardous Materials Maintenance Treatment Plan - Exterior' and 'Hazardous Materials Maintenance Treatment Plan - Interior' for locations of affected areas noted above.

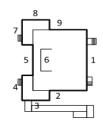
#### **Suspect Mold Growth Recommendations**

Suspect mold growth and stained building materials implies that there is or has been water intrusion or leaks or the relative humidity within the building was high enough to cause localized or widespread condensation. It is recommended that the moisture source be located and corrected, if this has not already taken place, remove fungal-impacted building materials, and replace or repair the water stained materials.

**CONSTRUCTED**: 1916 **GENERAL NOTES**:

The building exterior is in fair condition. The concrete foundation and most wood elements have peeling paint. The wood siding has exposed fasteners that are rusting. The older wood windows have had aluminum storm windows added on the exterior. The asphalt shingle roof is deteriorating and the roof structure has visible sagging. The wood ramp is not complaint with current handicap accessibility standards.





EXTERIOR MATERIAL /	DDOD! 544 ID54ITIFIED							PRO	OBL	ΕM	LO	CA	TIOI	N						DCMAD	DUGTO
FEATURE	PROBLEM IDENTIFIED	1	2	3	4	5	6	7	8	9	10	11	. 12	13	14	15	16	17	18	RCMD	РНОТО
Foundation																					
Concrete, Poured	Peeling Paint	•	•	•	•	•		•	•	•										P1	1
	Cracks or Pits in Concrete - Minor	•	•			•				•										C2	
	Cracks or Pits in Concrete - Major			•	•			•	•											C2	2, 4
	Cracked, Spalled Unit - Minor																			C2	
Concrete Stairs	Peeling Paint			•	•			•	•											P1	2,3
Wall System																					
Wood Siding	Deterioration - Minor			•	•	•	•	•	•											W2	
	Deterioration - Moderate	•	•							•										W2	
	Loose Elements																	Ī		W4	
	Missing Elements																	Ī		W5	
	Dirt Build-up on Wood	•	•	•	•	•	•	•	•	•								Ī		W6	
	Peeling Paint - Minor	•	•	•	•	•	•	•	•	•								Ī		P1	
	Chips, Cracks, Scratches																	Ī		W1	
	Unused Fixtures, Fittings, Anchors																	Ī		W8	
Wood Porches	Unpainted Material	•																Ī		P2	5
Wood Ramp	Unpainted Material		•																	P2	11
Doors	Peeling Paint - Major																	T		P1	
	Peeling Paint - Moderate																	Ī		P1	
	Deteriorating Material																			W3	
Windows	Inappropriate Material																	Ī		03	6
	Missing / Damaged Screen																	Ī		06	
	Peeling Paint - Major	•	•	•	•	•	•	•	•	•								Ī		P1	6
	Deteriorating Wood Frame - Minor																	Ī		W2	
	Deteriorating Wood Frame - Moderate	•	•	•	•	•	•	•	•	•								Ī		W2	
	Deteriorating Caulk	•	•	•	•	•	•	•	•	•										09	7
Roof System																		T			
Asphalt Shingles	Loose Shingles - Minor																			S1	
	Loose Shingles - Moderate	•	•	•	•	•	•	•	•	•								Ī		S1	
	Flashing Deterioration	•	•	•	•	•	•	•	•	•										M4	9,10
Eaves / Trim	Loose Elements																	Ī		W4	
	Peeling Paint - Moderate																	Ī		P1	
	Peeling Paint - Major	•	•	•	•	•	•	•	•	•								T		P1	8,9
	Deterioration - Minor																			W2	
	Deterioration - Moderate	•	•	•	•	•	•	•	•	•										W2	
Gutter and Downspouts	Deteriorating Gutter																			M1	
	Dented Gutter																			M7	
Structure	Sagging Ridge		•															T		ST1	10

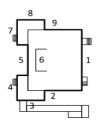
## **Architectural Maintenance and Treatment Plan - Exterior**

Quarters Building 18

**CONSTRUCTED**: 1916 **GENERAL NOTES**:

The building exterior is in fair condition. The concrete foundation and most wood elements have peeling paint. The wood siding has exposed fasteners that are rusting. The older wood windows have had aluminum storm windows added on the exterior. The asphalt shingle roof is deteriorating and the roof structure has visible sagging. The wood ramp is not complaint with current handicap accessibility standards.





EXTERIOR MATERIAL /	PROBLEM IDENTIFIED							PRC	BLI	EM	LOC	ATI	ON							RCMD	РНОТО
FEATURE	PROBLEM IDENTIFIED	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	KCIVID	РНОТО
Miscellaneous																					
Handicap Accessibility	Deteriorating Material / Finishes		•																	H2	
	Handicap Access Unavailable	•			•			•												Н3	
	Handicap Access Not Compliant		•																	H4	11
Wood Ramp	Unpainted Material				•															P2	11

#### PROBLEM KEY

= 1992 Condition

= 2010 Condition

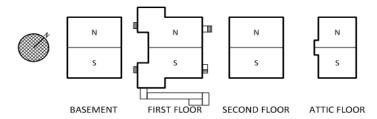
• = 1992 and 2010 Condition

## **Architectural Maintenance and Treatment Plan - Interior**

Quarters Building 18

# **CONSTRUCTED**: 1916 **GENERAL NOTES**:

The north portion of the building interior is unoccupied and the south portion is occupied. Both are in good condition. There is evidence of substantial water infiltration in the attics, with many of the second floor ceiling finishes peeling. Plastic membranes have been laid across the floors of the attics to help prevent further water damage below. Building levels and toilet rooms are not handicap accessible.



Interior renovations and finish upgrades have resulted in few or no significant historical features remaining to document. Interior conditions were not documented in the 1992 report for this building.



**1** Peeling paint at concrete foundation wall.



**3** Peeling paint, cracks and pits at concrete stair.



**2** Peeling paint, cracks and pits at concrete stair and foundation.



**4** Spalling at concrete foundation.



**5** Unpainted wood porch.



**7** Exposed rusting fasteners at wood siding; deteriorating caulk at windows.



**6** Peeling paint at window trim; aluminum storm windows installed at exterior.



**8** Peeling paint at soffits.

**Building 18** 



**9** Deteriorating metal flashing; peeling paint at soffits.



**10** Missing, damaged or worn shingles; sagging structure.



**11** Ramp unpainted and not compliant with current standards.

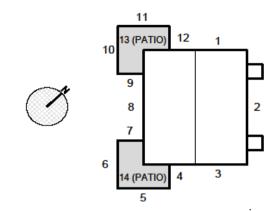
**CONSTRUCTED:** 1916

## **GENERAL STRUCTURAL NOTES:**

THE EXTERIOR STRUCTURAL SYSTEMS ARE IN 'GOOD' CONDITION BUT ARE IN NEED OF SOME MODERATE REPAIRS AS NOTED BELOW.

MODERATE REPAIRS ARE NEEDED FOR ALL THE FOUNDATION WALLS AS MINOR CRACKING TO THE EXISTING CONCRETE FOUNDATION WALLS HAS TAKEN PLACE. THIS IS TYPICAL OF ALL THE CONCRETE BUILDING FOUNDATION WALLS AS WELL AS THE PATIO FOUNDATION WALLS.

MINOR REPAIRS ARE NEEDED FOR ALL EXTERIOR WOOD STAIRS & ASSOCIATED PATIOS. MINOR DETERIORATION OF THE EXPOSED WOOD HAS TAKEN PLACE OVER TIME. IT IS RECOMMENDED THAT THE EXPOSED PATIO STAIRS BE REFINISHED TO HELP PREVENT FURTHER DETERIORATION.



EXTERIOR ITEM	DRODI EM IDENITIFIED								PRO	DBL	EM	LO	CAT	IOI	١							DCNAD	DUOTO
EXTERIOR ITEM	PROBLEM IDENTIFIED	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	KCIVID	РНОТО
Structural - Foundation																							
Concrete Foundation Wall -	Wall Cracking - Minor	•	•	•	•	•	•	•	•	•	•	•	•									C2	1, 4
Exterior	Problem 1 - Moderate																						
Exterior	Problem 1 - Major																						
	Deterioration of Exterior Wood																					\A/2	2
Wood Floor Framing - Patio Stairs	Stair - Minor	Ľ			Ľ			•														W2	2
Wood Floor Flaming - Patio Stairs	Problem 1 - Moderate																						
	Problem 1 - Major																						
	Deterioration of Exterior Wood				Ĺ																	\A/2	3
Wood Floor Framing - Entry Stairs	Stair - Minor	•			•			•														W2	3
Wood Floor Framing - Entry Stairs	Problem 1 - Moderate																						
	Problem 1 - Major																						
Structural - Roof																							

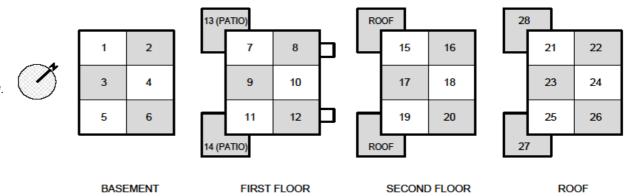
## **CONSTRUCTED**: 1916

**GENERAL STRUCTURAL NOTES:** 

THE INTERIOR STRUCTURAL SYSTEMS ARE IN 'GOOD' CONDITION BUT ARE IN NEED OF SOME MODERATE REPAIRS AS NOTED BELOW.

MODERATE REPAIRS ARE NEEDED FOR ALL THE FOUNDATION WALLS AS MINOR CRACKING TO THE EXISTING CONCRETE FOUNDATION WALLS HAS TAKEN PLACE.

MODERATE REPAIRS ARE NEEDED FOR THE FIRST FLOOR FRAMING AND ASSOCIATED FLOOR BOARDS. MINOR DETERIORATION OF THE EXISTING FIRST FLOOR FRAMING & ASSOCIATED FLOOR BOARDS WAS FOUND AS NOTED BELOW. HOWEVER, THE FOLLOWING TWO ITEMS ARE OF MORE SIGNIFICANT CONCERN AND SHOULD BE ADDRESSED IN THE NEAR FUTURE. FIRST, THERE WAS SIGNIFICANT SPLITTING OF THE EXISTING FIRST FLOOR WOOD SUPPORT BEAMS. IN ADDITION, A SIGNIFICANT 'SAG' & STRUCTURAL DEFLECTION WAS NOTED IN THE AREA OF THE SECOND FLOOR 'SLEEPING' PORCHES. IN BOTH OF THESE INSTANCES, THESE ITEMS SHOULD BE ADDRESSED IN THE NEAR FUTURE TO PREVENT FURTHER STRUCTURAL DETERIORATION.



MODERATE REPAIRS ARE NEEDED FOR ROOF FRAMING AND ASSOCIATED ROOF BOARDS. MINOR DETERIORATION OF THE EXISTING ROOF FRAMING & ASSOCIATED FLOOR BOARDS WAS FOUND AS NOTED BELOW.

INITEDIOD ITEM	DDOD! FAA IDENITIEIED											Р	RO	BLI	ΕM	LOC	ΈAΤ	101	V											DCMAD	DUOTO
INTERIOR ITEM	PROBLEM IDENTIFIED	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	KCIVID	РНОТО
Structure - Floors																															
Concrete Floor Slab -	Floor Cracking - Minor	•	•	•			•																							C2/C3	5
Basement	Problem 1 - Moderate																														
Dasement	Problem 1 - Major																														
	Problem 1 - Minor																														
Wood Floor Framing - First &	Deterioration of Wood Floor										•	•	•																	W3	7
Second Floors	Framing - Moderate							•				•																		VV 3	/
Second Floors	Warping of Existing Floor																													F\A/1	
	Construction - Major																•		•		•									FW1	
Structure - Walls/Columns																															
	Wall Cracking - Minor	•	•	•	•																									C2	9
Structural Walls - Concrete	Problem 1 - Moderate																														
	Problem 1 - Major																														
Structure - Roof																															
	Deterioration of Existing Wood																									_				14/2	6.0
Mand Doof Francisco	Roof Framing - Minor																					•	•	•	•	•	•			W2	6, 8
Wood Roof Framing	Problem 1 - Moderate															Î															
	Problem 1 - Major															Î															



**Photo 1:** Deterioration & Cracking at Existing Concrete Foundation Walls.



**Photo 3**: Deterioration of Exterior Wood Stair & Associated Framing.



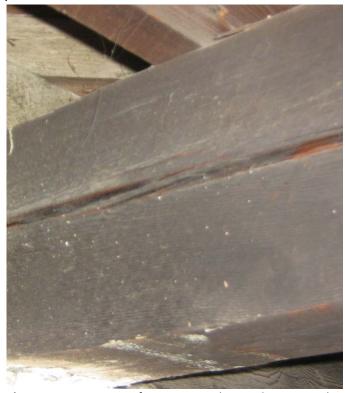
**Photo 2**: Deterioration of Exterior Wood Stair & Associated Framing.



**Photo 4:** Deterioration & Cracking at Existing Concrete Foundation Walls.



**Photo 5:** Deterioration & Cracking at Existing Concrete Floor Slab.



**Photo 7:** Deterioration of Existing Wood Beam & Associated Floor Framing.



**Photo 6:** Deterioration of Exterior Wood Roof Boards.

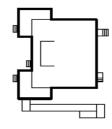


**Photo 8:** Deterioration of Existing Wood Roof Framing & Associated Roof Boards.



**Photo 9:** Deterioration & Cracking at Existing Concrete Foundation Walls.

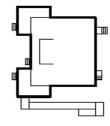




EVERNOR OVOETAGE	I			OPERA	TIONAL	251412140
EXTERIOR SYSTEMS	ITEMS NOTED	YES	NO	YES	NO	REMARKS
Lighting						
General Lighting	277 volt lighting		•			
	120 volt lighting	•		•		
	Incandescant Lighting	•		•		
	Fluorescant Lighting		•			
	Recessed Mount Fixtures		•			
	Suspended Fixtures		•			
	Wall pack fixtures	•		•		
	·					
Emergency Lighting	Emergency units with lighting heads		•			
Lighting Control	Toggle switches	•		•		
	Time clock		•			
Power	İ	İ				
Service and Distribution	277/480 volt, 3 phase, 4 wire service		•			
	120/208 volt, 3 phase, 4 wire service		•			
	120/240 volt, 1 phase, 3 wire service	•		•		
	Pad mount transformer location	•		•		XF 62, west side building, between 18 & 62
	Main service disconnecting means	•		•		150A MCB in basement
	Emergency generator		•			130/(Web III basement
	Auto door operators					
	Nato door operators					
Electrical Installations	Underground service entrance	•				
Licetifed instanctions	Overhead service entrance		•			
	evernedd service entranse					
Fire Alarm	1					
Notification	Horns and strobes		•			
	Speakers and strobes		•			
	Chime/bell		•			
	·					
Detection	PIV (post indicator valve) interface		•			
	,					
Nurse Call System			•			
,						
Access Control System			•			
, , , , , , , , , , , , , , , , , , ,						
Intrusion Detection	<u> </u>			<del>                                     </del>	<del>                                     </del>	
System						
7,000	<u> </u>					
Video Surveillance	<u> </u>					
System			•			
•						
Synchronized Clock	<u>.</u> 					
System			•			
-,	l					<u> </u>

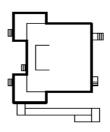
Quarters



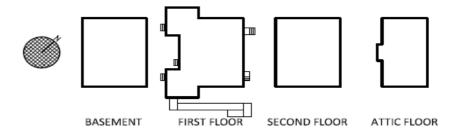


				OPERA	TIONAL	
EXTERIOR SYSTEMS	ITEMS NOTED	YES	NO	YES	NO	REMARKS
				1		
Overhead Paging System						
o terricum ruging o yotem			•			
Structured Cabling	1					
Pathways	Manholes		•			
	Handholes		•			
	Buried conduit		•			
	Ductbank		•			
	Direct-buried cable	•		•		coax & phone
Incoming Service Demarc	Wall-mounted multipair copper	•		•		south side exterior
5 2 2 1 1 3 5 2 5 1 1 d 1 d	Wall-mounted fiber optic		•			·
	Wall-mounted coaxial copper	•				south side exterior
Incoming Service Cable	multipair copper (list pair count)	•				6-pr
0 1 1 1 1 1 1	fiber optic (list strand types and count)		•			2-12
	coaxial copper	•				
	1 12 12 12					
Backbone Cable Types	multipair copper (list pair count)		•			
,,	Category 5e or 6 UTP		•			
	fiber optic (list strand types and count)		•			
	coaxial copper		•			
	.,					
Mechanical						
Ventilation Equipment						
' '	Wall mounted louvers		•			
	Roof intake hood		•			
	Roof exhaust hood		•			
	Wall mounted exhaust fans		•			
	Roof mounted fans		•			
	Areawell style outside air intake		•			
	Areawell style exhaust discharge		•			
	, 3					
Heaing or Cooling	Roof rounted residential condensing unit		•			
Equipment	Roof mounted commercial condensing unit		•			
	Pad mounted residential condensing unit	•		•		
	Pad mounted commercial condensing unit		•			
	Roof mounted HVAC unit		•			
	Pad mounted HVAC unit		•			
	PTAC unit		•			
	Window air conditing units		•			
	-					

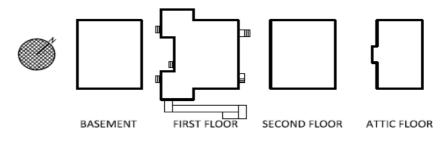




ITEMS NOTED	VEC	NO	OPERA	TIONAL	DEMARKS
ITEMS NOTED	YES	NO	YES	NO	REMARKS
Gutters to grade	•		•		
Gutters to underground storm piping		•			
Sump discharge to grade	•		•		
Exterior hose bibs	•		•		
Gas meter	•		•		
Fire department connection		•			
Post indicator valve		•			
Sprinklers		•			
Hose valve		•			
	Gutters to underground storm piping Sump discharge to grade  Exterior hose bibs  Gas meter  Fire department connection Post indicator valve Sprinklers	Gutters to grade Gutters to underground storm piping Sump discharge to grade  Exterior hose bibs  Gas meter  Fire department connection Post indicator valve Sprinklers	Gutters to grade Gutters to underground storm piping Sump discharge to grade  Exterior hose bibs  Gas meter  Fire department connection Post indicator valve Sprinklers	ITEMS NOTED  YES  OUTHERS NOTED  YES  OUTHERS NO  YES  NO  YES  OUTHERS NO  YES  NO  YES  NO  YES  OUTHERS NO  YES  NO  NO  NO  NO  NO  NO  NO  NO  NO  N	Gutters to grade Gutters to underground storm piping Sump discharge to grade  Exterior hose bibs  Gas meter  Fire department connection Post indicator valve Sprinklers  NO  YES NO  O  O  O  O  O  O  O  O  O  O  O  O

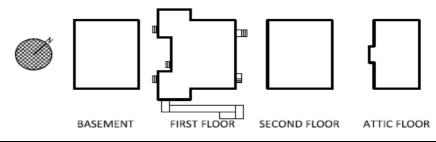


INTERIOR CYCTEMS	ITEMS NOTED	YES	NO	OPERA	TIONAL	DEMARKS
INTERIOR SYSTEMS	ITEMS NOTED	YES	NO	YES	NO	REMARKS
Lighting						
General Lighting	277 volt lighting		•			
	120 volt lighting	•		•		
	Incandescant Lighting	•		•		
	Fluorescant Lighting	•		•		
	Recessed Mount Fixtures		•			
	Surface Mount Fixtures	•		•		
	Suspended Fixtures	•		•		
	Track lighting		•			
	le vi ei		<u> </u>			
Emergency Lighting	Exit Signs		•	•		
	Exit Signs with lighting heads	1	•	•		
	Emergency units with lighting heads		•	•		
	Battery units internal to fixture		•	•		
Lighting Control	Toggle switches	•		•		
Lighting Control	Toggle switches		•			
	Occupancy sensors Time clock					
	Time clock					
Power	1					
Service and Distribution	277/480 volt, 3 phase, 4 wire service		•			
	120/208 volt, 3 phase, 4 wire service		•			
	Main electrical service size	•		•		
	120/240 volt, 1 phase, 3 wire service	•		•		
	Emergency generator		•			
	Branch panels throughout building		•			
	Passenger or freight elevator		•			
	Auto door operators		•			
Electrical Installations	Surface panelboards	•		•		
	Recessed panelboard		•			
	Concealed conduit/backboxes	•		•		
	Exposed surface mount conduit/backboxes		•			
	Exposed surface mount raceway/backboxes		•			
Fire Alarm						
Fire Control Panel	Fire Alarm Control Panel		•			
	Fire Alarm Annunciator		•			
	Addressable fire alarm system		•			
	Zone fire alarm system		•			
	Wired to campus fire alarm fiber optic loop		•			

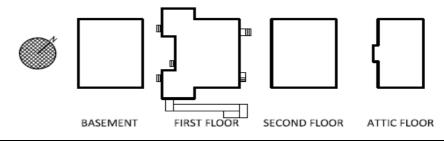


INTERIOR CYCTERIC	ITEMS NOTED	1/50		OPERA	TIONAL	DENANDIC
INTERIOR SYSTEMS	ITEMS NOTED	YES	NO	YES	NO	REMARKS
Notification	Horns and strobes		•			
	Speakers and strobes		•			
	Chime/bell		•			
Detection	Smoke detection	•		•		
	Duct smoke detection		•			
	Heat detection		•			
	Pull stations		•			
	Fire protection system interface		•			
	PIV (post indicator valve) interface		•			
	Smoke alarms - 120 volt stand alone	•		•		
	Magtetic hold opens		•			
	indigicale note opens					
Nurse Call System	<u> </u>		•		<u> </u>	
ivuise Caii Systeiii					-	
Accord Control Control	<u> </u>				<u> </u>	
Access Control System			•			
Intrusion Detection						
System			•			
Video Surveillance						
System			•			
Synchronized Clock						
System			•			
Overhead Paging System						
			•			
Structured Cabling						
Incoming Service Type	POTS lines	•		•		
	Digital voice lines (list type of circuit)		•			
	Data circuit (list type)		•			
	CATV from service provider (list type)	•		•		
	TV antenna		•			
Incoming Service Cable	multipair copper (list pair count)	•		•		6-pr
-	fiber optic (list strand types and count)		•			
	coaxial copper	•		•		
Backbone Cable Types	multipair copper (list pair count)		•			
	Category 5e or 6 UTP		•			
	fiber optic (list strand types and count)		•			
	coaxial copper		•			
	Country copper		Ť			

Chapter 3: Architectural and Archeological

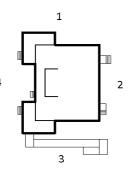


	l	l .		OPERA	TIONAL	
INTERIOR SYSTEMS	ITEMS NOTED	YES	NO	YES	NO	REMARKS
Horizontal Cable Types						
,,	Quad cable (red/green/yellow/black cond.)	•		•		
(list MFR, P/N, & rating)						
	Category 3 UTP	•		•		
	Category 5e UTP	•		•		
	Category 6 UTP		•			
	fiber optic (list stand types and count)		•			
Telecom Room						
Connectivity	Wall-mounted voice punchdown blocks	•		•		
(list MFR, P/N, types)	rack-mounted voice punchdown blocks		•			
	wall-mounted fiber termination cabinets		•			
	rack-mounted fiber termination cabinets		•			
	wall-mounted UTP patch panels		•			
	rack-mounted UTP patch panels		•			
	wall-mounted coaxial terminations	•		•		
	rack-mounted coaxial patch panels		•			
Workstation Connectivity						
	UTP voice jacks	•		•		
(list MFR, P/N, colors)	UTP data jacks		•			
	fiber optic connectors (list type)		•			
	coaxial copper	•		•		installed exposed and in faceplates, some cabling
	faceplates	•		•		installed on exterior of building
Mechanical						
General Mechanical	Natural ventilation	•		•		
	Mechanical ventilation		•			
	Air conditioning - DX	•		•		
	Air conditioning - campus chilled water		•			
	Overhead air distribution	•		•		Upper level
	Underfloor air distribution	•		•		Lower level
	Steam service & location		•			
	Chilled water service & location		•			
	Single zone HVAC units	•		•		
	Multi-zone HVAC units		•			
	Individual toilet room exhaust fans		•			
	Hot water reheat		•			
	Steam reheat		•			

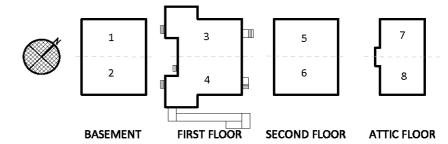


INITEDIOD CVCTENAC	ITERAC NOTED	VEC	NO	OPERA	TIONAL	DENAADIKS
INTERIOR SYSTEMS	ITEMS NOTED	YES	NO	YES	NO	REMARKS
Mechanical Equipment	Furnances & heating type	•		•		High efficiency natural gas heat, DX cooling
	Blower Coil Units & heating type		•			
	Air Handling Units & heating type		•			
	Baseboard heat & heating type	•		•		Electric in bathroom
	Cabinet heat & heating type		•			
	Steam Radiators		•			
	PTAC units		•			
	Window air conditioning units		•			
	Hot water boiler		•			
Temperature Control	Standalone thermostats	•		•		
'	Pneumatic controls		•			
	DDC controls		•			
	Temperature control zoning					Zoned per apartment
Plumbing	1					
Service and Distribution	Water service size and location	•		•		1-1/2" enter north side of building
Jervice and Biotinbation	Hot water system - 140°F		•			
	Hot water system - 115°F	•		•		
	Hot water recirculation		•			
	Underground domestic distribution		•			
	onderground domestic distribution					
Plumbing Equipment	Low efficiency gas water heater -tank type	•		•		
Tambing Equipment	High efficiency gas water heater - tank type		•			
	Electric water heater - tank type		•			
	Steam water heater - tank type		•			
	Boiler with separate storage tanks		•			
	Sump pump	•		•		
Plumbing Fixtures	Commercial type fixtures		•			
Ü	Residential type fixtures	•		•		
	Tank type water closets	•		•		
	Flushvalve water closets		•			
	Manual faucets type lavatories	•		•		
	Sensor faucet type lavatories		•			
Fire Protection	1					
General Fire Protection	Sprinklered		•			
2	Attic sprinklered		•			
	Standpipe		•			
	2-1/2" hose vavles					
	1-1/2" hose valves	1	•	1		
	1 1/2 HOSE VALVES		+			
P Equipment	Fire Pump	1	•	1	<u> </u>	





EVERNOR ITEM	DDODLEM IDENTIFIED							PRO	OBL	EM	LO	CAT	IOI	N						DCMAD	BUIGTO
EXTERIOR ITEM	PROBLEM IDENTIFIED	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	RCMD	РНОТО
Asbestos																					
Lead-Based Paint	peeling paint																				
	on doors and door frames		•		•															LBP1	
	on foundation walls	•	•	•	•															LBP1	2
	on stairs		•		•															LBP1	1
	on eaves and trim	•	•	•	•															LBP1	4
	on wood clapboards	•	•	•	•															LBP1	1
	porch structural members				•															LBP1	
	on window frames	•	•	•	•															LBP1	3
Mold Growth	suspect mold growth																				
	on siding																			M01	
	on porch																			M01	
	water-stained building materials																				
	porch structural members	•		•	•															M02	



INTERIOR ITEM	PROBLEM IDENTIFIED	PROBLEM LOCATION														DCNAD	Виото				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	RCMD	РНОТО
Asbestos	damaged, peeling vinyl flooring			•	•															AS01	9
	exposed friable thermal insulation							•	•											AS01	10
Lead-Based Paint	peeling paint																				
	on doors and door frames			•																LBP1	
	on foundation wall	•	•																	LBP1	
	on wall			•																LBP1	6
	on ceiling			•																LBP1	5
	on window frames																			LBP1	
	on wood framing	•	•	•	•															LBP1	
	stairs and handrail																			LBP1	
Mold Growth	suspect mold growth															Γ					
	on window frame							•												M01	8
	on floor																			M01	
	water-stained building materials																				
	wood structural members	•	•					•	•											M02	
	wall	•	•																	M02	7
	floor	•	•																	M02	7



**1** Peeling paint on wood clapboards and stairs.



**3** Peeling paint on window frame.



**2** Peeling paint on foundation walls.



**4** Peeling paint on eaves/trim.



**5** Peeling paint on ceiling.



**7** Discoloration of walls and floors in basement.



**6** Peeling paint on wall.



**8** Suspect mold growth on window frame.



**9** Peeling vinyl flooring in kitchen.

Quarters



**10** Exposed friable insulation in attic.